REMARKS

Claims 12-13, 16-28 and 32-33 remain in this application.

Claims 12, 28 and 33, all of the independent claims in this application, have now been modified so that each includes recitation that the axial slots form a Faraday cage, the interior of which is a field-free space which can be coated only with difficulty. Each of these claims goes on to recite that the particles used to coat the body are of a size of at least 150 μm so that the coating, even within the axial slots, reaches a thickness of between 1.0 and 2.0 mm before so much charge is carried into the slots that the charge prevents further accumulation of particles. In other words, all of the claims now clearly recite an apparatus or a method in which the coating is built up to between 1.0 and 2.0 mm, even within the Faraday cage axial slots of the ferromagnetic body. None of the cited prior art has, or in any way teaches, such a combination of limitations.

The examiner rejected claims 12-13, 16-27 and 33 as unpatentable over Hapsburg-Lothringen in view of Hopeck, Otani et al and Matsuzaki et al. With regard to this rejection the following is pointed out:

Habsburg-Lothringen describes the coating of an armature of an electric motor by a "fluidized bed electrostatic coating" method, see column 4, lines 45+. This is also described in the background section of the present application at page 2, paragraphs 5 and 6. However, it is pointed out that with such a method, it is not possible to create relatively large layer thicknesses such as between 1.0 and 2.0 mm. Habsburg-Lothringen include an indication that their method is not limited to the fluidized bed method. But this reference does not provide

any indication that a "direct powder spraying onto the body" can be used to achieve a sufficiently thick coating, and certainly does not teach that such a spraying method could achieve a sufficient thickness within the stator slots. This requirement is something that is now recited by all of the claims. As pointed out by the examiner in the last 4 lines of page 4 of the action, this was one area of the claims which may have been lacking, and accordingly, as suggested by the examiner, this has been corrected by the present amendment.

Hopeck describes a coating method in which connecting elements of a dynamo-electrical machine are coated with epoxy powder by means of spray methods, and that layer thicknesses of up to 0.020 inches are produced. However, even from Hopeck one skilled in the art does not find any indication whatsoever that this spray method could be used for coating inside the slots of a motor armature. This is particularly so because the slots act as a Faraday cage. Even though Hopeck gives a measurement for the layer thickness of up to 0.045 inches, this measurement does not refer to the interior of the slots, since the slots form a Faraday cage and would preclude such a thickness of coating from building up within them without some further knowledge beyond the teachings of Hopeck.

In other words, a layer thickness such as recited in the present claims for the area within the slots of a motor, is simply not attainable without the knowledge which is disclosed only by the present invention.

As one skilled in the art knows, the field lines of the electrical field that develops between the spraying site and the body are concentrated at pointed protrusions of the body. Inside the slots, a Faraday cage is created which is free of field lines, and therefor the inside

of the slots could be coated only with great difficulty, until the advent of applicant's invention.

According to the present invention, particles of a defined size, an average diameter greater than 150 μm, are used for the spraying method. By using such coarse plastic powder, which is sprayed onto the motor armature including into the slots each of which forms a Faraday cage, a sufficiently large layer thickness can be formed of approximately 1.0 to 2.0 mm on both the outer circumference and also on the inner walls of the slots. In the course of the deposition of these coarse powder particles, markedly less electrical charge accumulates at the surface, so a potential difference continues to exist between the charged particles of the spray gun and the grounded motor armature.

The use of this kind of coarse-particle plastic powder with a mean diameter of >150 μm, however, has not previously been known to one skilled in the art, and especially not from any of the references cited.

Quite the contrary. Until now, for the use of spray nozzles, it was only known to use markedly smaller particles with mean diameters of <100 μm. For this reason, the claims have been revised such that now all of them clearly recite the particle size, and thus define over the teachings of Hopeck.

While Matsuzaki et al does disclose the use of a particle size in the range from 3 to 180 μm, this material is used explicitly only for an "electrostatic fluidized bed coating apparatus" (column 5, line 29), and not for a spraying method. This coating method for an armature motor is quite well known. However, as set forth in the background section of the

present application, regardless of this particle size as taught by Matsuzaki et al, one skilled in the art finds no indication whatsoever, not in Matsuzaki et al, and not in any of the cited prior art, of applying plastic powder with a particle size having a diameter of greater than 150 μm to a motor armature by means of "direct powder spraying".

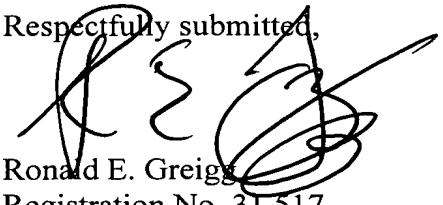
Therefore a combination of the cited references does not teach the particulars of the present invention, especially not as recited in the claims. The present invention is only realized from the prior art based on impermissible hindsight, and only with knowledge of the present invention already in hand.

In further point of fact, the Matsuzaki et al reference points precisely away from the present spraying method, since Matsuzaki et al use a special "Charge-Controlling-Agent" (see claim 1), which has a diameter of 0.01 to 1 μm. For technical reasons this "Charge-Controlling-Agent," with its very small diameter, cannot be sprayed together with the other particles of up to 180 μm diameter by means of any known spraying methods. The two entirely differently sized particles will simply not work together in the same spraying apparatus.

As pointed out above, claims 12, 28 and 33, plus the claims which depend on them, are therefore not anticipated by, and further are not made obvious by, the cited references.

For all of the above reasons, whether taken singly or in combination with each other, entry of this amendment and allowance of the claims are courteously solicited.

Respectfully submitted,



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